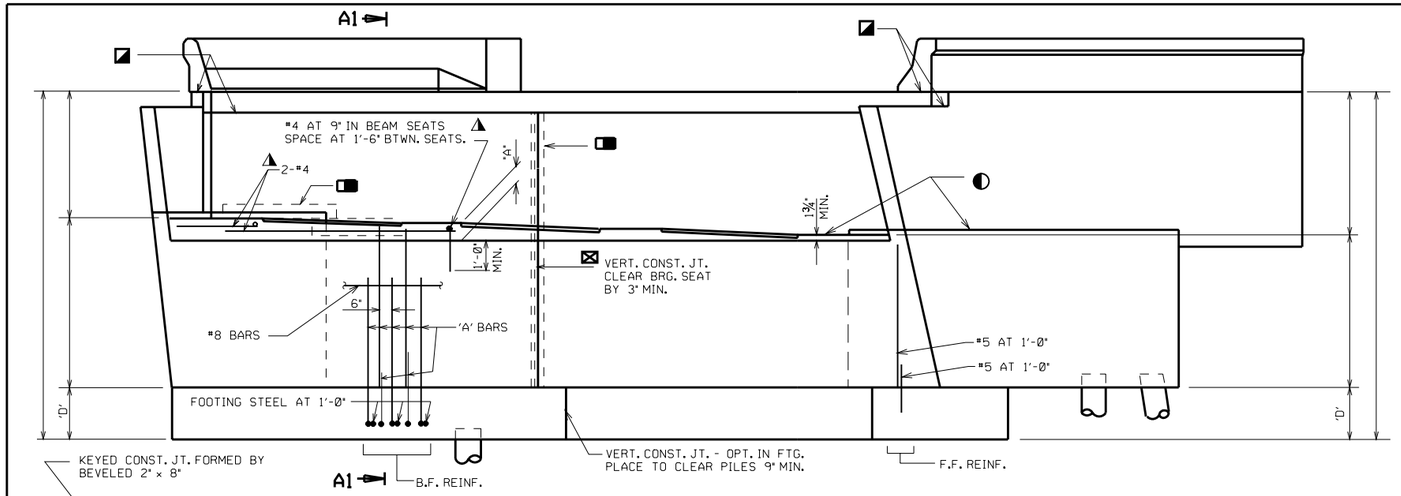
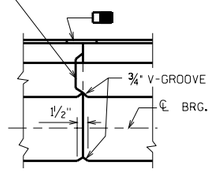


FRONT ELEVATION

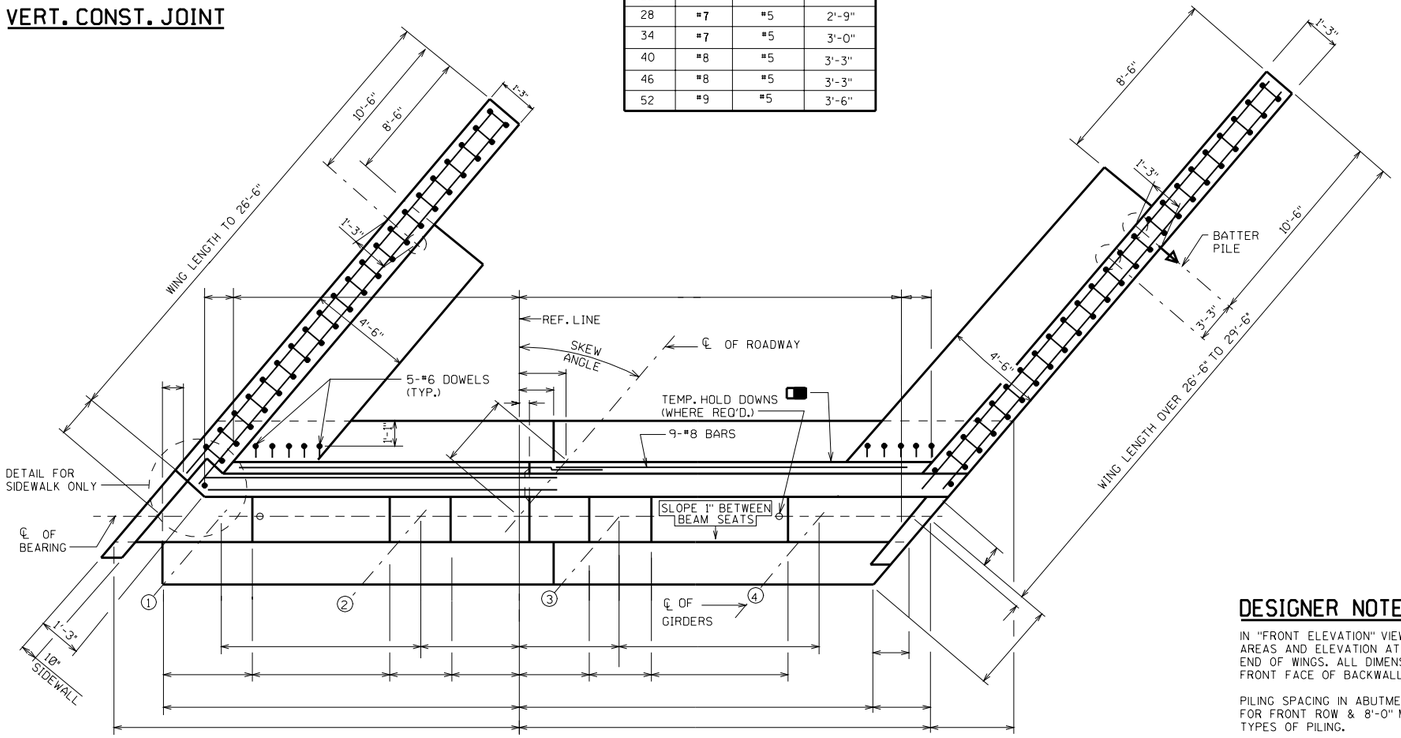


VERT. CONST. JOINT

P_{DES} = 1.3(PDL+5/3 PLL)
P = PDL + PLL

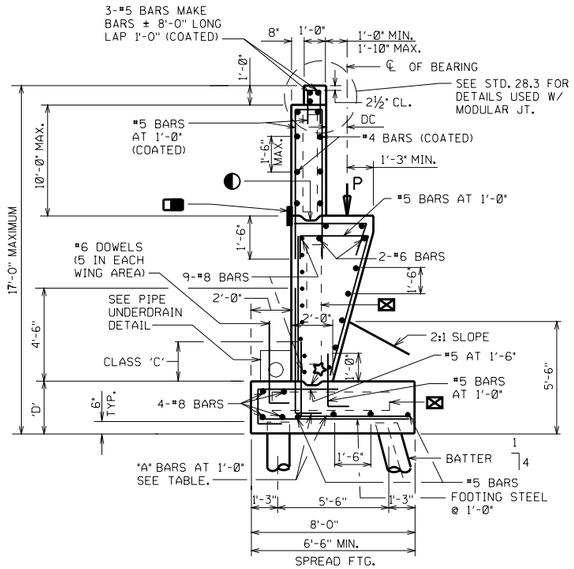
P_{DES} k/FT.	'A' BAR SIZE	FOOTING STEEL SIZE	FOOTING DEPTH 'D'
10	#6	#5	2'-0"
16	#6	#6	2'-3"
22	#7	#5	2'-6"
28	#7	#5	2'-9"
34	#7	#5	3'-0"
40	#8	#5	3'-3"
46	#8	#5	3'-3"
52	#9	#5	3'-6"

PILE REACTIONS PER FOOT IN KIPS
FRONT ROW = P(.44+DC/5.5)+10.1
BACK ROW = P(.56-DC/5.5)+7.6



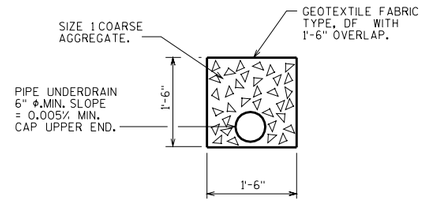
PLAN

SQUARE OFF END OF FOOTING AS SHOWN WHEN ABUTMENT IS SKEWED OVER 20°.



NOTE: ALL LONGIT. BARS NOT LABELED IN SECTION 'A1' ARE #4 BARS.

SECTION A1



PIPE UNDERDRAIN DETAIL

LEGEND

- OPTIONAL KEYED CONST. JOINT FORMED BY BEVELED 2" × 6". USE ¾" "V" GROOVE ON F.F. OF WINGWALL ONLY. IF JOINT IS NOT USED WATERPROOFING IS NOT REQ'D.
- THIS STEEL IS REQUIRED ONLY IF DIMENSION "A" EXCEEDS 4".
- 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS ON BACKFACE ABOVE FOOTING.
- KEYED CONST. JOINT FORMED BY A BEVELED 2" × 6".
- POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.
- WHEN BODY SECTION IS MORE THAN ± 50'-0" LONG PROVIDE VERTICAL CONST. JOINT. RUN BAR STEEL THRU JOINT. SEE STD. 12.9 FOR ALTERNATE CONSTRUCTION JOINT.

DESIGNER NOTES

IN "FRONT ELEVATION" VIEW, GIVE ELEVATION OF ALL BEARING AREAS AND ELEVATION AT BOTTOM OF RAIL PARAPETS AT EACH END OF WINGS. ALL DIMENSIONS AND ELEVATIONS ARE TAKEN AT FRONT FACE OF BACKWALL.

PILING SPACING IN ABUTMENT BODY SHALL BE 8'-0" MAX. FOR FRONT ROW & 8'-0" MAX. FOR BACK ROW FOR ALL TYPES OF PILING.

LAP LENGTH FOR HORIZONTAL BARS SHALL BE BASED ON A "CLASS C" TOP TENSION LAP SPLICE.

PARAPET NOT SHOWN IN PLAN VIEW.

ABUTMENT A4 PILE FOOTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DEVELOPMENT SECTION

APPROVED: Stanley W. Woods — DATE: 7-04

STANDARD 12.5